

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-45. (canceled)

46. (new) A method of making a coated abrasive article comprising the steps of:

(a) introducing a slurry comprising a binder and abrasive particles onto a production tool, wherein the production tool is shaped to include a plurality of protruding cavities distributed in two dimensional array, each cavity having:

a rectangular base defined by a first side edge, a second side edge, a third side edge opposite the first side edge, and a fourth side edge opposite the second side edge, and

a linear region most distal from the base, which when projected on to a plane coplanar with the base, extends from the first side edge to the third side edge, and is offset from a center point of the first side edge and from a center point of the third side edge toward the second side edge by an offset vector, wherein the offset vector is in the same direction generally the same distance for each of the cavities;

(b) introducing a backing to the outer surface of the production tool such that the slurry wets one side of the backing to form an intermediate article;

(c) at least partially curing the binder before the intermediate article departs from the outer surface of the production tool to form a coated abrasive article; and

(d) removing the coated abrasive article from the production tool.

47. (new) The method of claim 46, wherein each linear region of each cavity is the same distance from the rectangular base.

48. (new) The method of claim 46, wherein none of the first side edge, second side edge, third side edge, and fourth side edge of the cavity is parallel to an edge of the coated abrasive article.

49. (new) The method of claim 46, wherein the first side edge and the third side edge of the cavity are parallel to an edge of the abrasive article.

50. (new) The method of claim 49, wherein the rectangular base of the cavity is a square base.

51. (new) The method of claim 46, wherein adjacent bases of the cavities do not abut.

52. (new) The method of claim 46, the slurry further comprising a grinding aid.

53. (new) A method of abrading a surface of a workpiece comprising steps of:

(a) providing a coated abrasive article comprising a backing having attached to at least one major surface thereof a plurality of protruding units distributed in a two dimensional array, each protruding unit comprising:

organic binder and abrasive particles,

a rectangular base defined by a first side edge, a second side edge, a third side edge opposite the first side edge, and a fourth side edge opposite the second side edge, and

a linear region most distal from the base, which when projected on to a plane coplanar with the base, extends from the first side edge to the third side edge, and is offset from a center point of the first side edge and from a center point of the third side edge toward the second side edge by an offset vector, wherein the offset vector is in the same direction generally the same distance for each of the protruding units;

(b) placing the surface of the article having protruding units attached thereto in contact with the surface of the workpiece; and

(c) moving at least one of the surface of the article or the surface of the workpiece with respect to the other so as to abrade the surface of the workpiece.

54. (new) The method of claim 53, wherein each linear region of each protruding unit is the same distance from the rectangular base.

55. (new) The method of claim 53, wherein none of the first side edge, second side edge, third side edge, and fourth side edge of the protruding unit is parallel to an edge of the coated abrasive article.

56. (new) The method of claim 53, wherein the first side edge and the third side edge of the protruding unit are parallel to an edge of the abrasive article.

57. (new) The method of claim 56, wherein the rectangular base of the protruding unit is a square base.

58. (new) The method of claim 53, wherein adjacent bases of the protruding units do not abut.

59. (new) The method of claim 53, each protruding unit further comprising a grinding aid.

60. (new) A method of making a coated abrasive article comprising the steps of:

(a) introducing a slurry comprising binder and abrasive particles onto a surface of a backing;

(b) introducing a production tool to the surface of the backing on which the slurry has been introduced to form an intermediate article, wherein the production tool is shaped to include a plurality of cavities distributed in a two dimensional array, wherein each cavity has:

a rectangular base defined by a first side edge, a second side edge, a third side edge opposite the first side edge, and a fourth side edge opposite the second side edge, and

a linear region most distal from the base, which when projected on to a plane coplanar with the base, extends from the first side edge to the third side edge, and is offset from a center point of the first side edge and from a center point of the third side edge toward the second side edge by an offset vector, wherein the offset vector is in the same direction generally the same distance for each of the cavities;

(c) at least partially curing the binder before the intermediate article departs from the production tool to form a coated abrasive article; and

(d) removing the coated abrasive article from the production tool.

61. (new) The method of claim 60, wherein each linear region of each cavity is the same distance from the rectangular base.

62. (new) The method of claim 60, wherein none of the first side edge, second side edge, third side edge, and fourth side edge of the cavity is parallel to an edge of the coated abrasive article.

63. (new) The method of claim 60, wherein the first side edge and the third side edge of the cavity are parallel to an edge of the abrasive article.

64. (new) The method of claim 63, wherein the rectangular base of the cavity is a square base.

65. (new) The method of claim 60, wherein adjacent bases of the cavities do not abut.

66. (new) The method of claim 60, the slurry further comprising a grinding aid.

67. (new) A method of making a coated abrasive article comprising the steps of:

(a) introducing a slurry comprising binder and abrasive particles onto a production tool, wherein the production tool is shaped to include

a plurality of cavities distributed in a two dimensional array, each cavity having:

a rectangular base defined by a first side edge, a second side edge, a third side edge opposite the first side edge, and a fourth side edge opposite the second side edge, and

a linear region most distal from the base, which when projected on to a plane coplanar with the base, extends from the first side edge to the third side edge, and is offset from a center point of the first side edge and from a center point of the third side edge toward the second side edge by an offset vector, wherein the offset vector is in the same direction generally the same distance for each of the cavities;

- (b) introducing a backing to the outer surface of the production tool such that the slurry wets one side of the backing to form an intermediate article;
- (c) removing the intermediate article from the production tool; and
- (d) curing the binder to form a coated abrasive article.

68. (new) The method of claim 67, wherein each linear region of each cavity is the same distance from the rectangular base.

69. (new) The method of claim 67, wherein none of the first side edge, second side edge, third side edge, and fourth side edge of the cavity is parallel to an edge of the coated abrasive article.

70. (new) The method of claim 67, wherein the first side edge and the third side edge of the cavity are parallel to an edge of the abrasive article.

71. (new) The method of claim 70, wherein the rectangular base of the cavity is a square base.

72. (new) The method of claim 67, wherein adjacent bases of the cavities do not abut.

73. (new) The method of claim 67, the slurry further comprising a grinding aid.

74. (new) A method of making a coated abrasive article comprising the steps of:
- (a) introducing a slurry comprising binder and abrasive particles onto a surface of a backing;
 - (b) introducing a production tool to the surface of the backing on which the slurry has been introduced to form an intermediate article, wherein the production tool is shaped to include a plurality of cavities distributed in a two dimensional array, each cavity having:
 - a rectangular base defined by a first side edge, a second side edge, a third side edge opposite the first side edge, and a fourth side edge opposite the second side edge, and
 - a linear region most distal from the base, which when projected on to a plane coplanar with the base, extends from the first side edge to the third side edge, and is offset from a center point of the first side edge and from a center point of the third side edge toward the second side edge by an offset vector, wherein the offset vector is the same for each of the cavities;
 - (c) removing the intermediate article from the production tool; and
 - (d) curing the binder to form a coated abrasive article.
75. (new) The method of claim 74, wherein each linear region of each cavity is the same distance from the rectangular base.
76. (new) The method of claim 74, wherein none of the first side edge, second side edge, third side edge, and fourth side edge of the cavity is parallel to an edge of the coated abrasive article.
77. (new) The method of claim 74, wherein the first side edge and the third side edge of the cavity are parallel to an edge of the abrasive article.
78. (new) The method of claim 77, wherein the rectangular base of the cavity is a square base.

79. (new) The method of claim 74, wherein adjacent bases of the cavities do not abut.
80. (new) The method of claim 74, the slurry further comprising a grinding aid.